

Chapter VI

Theory and Practice for Distance Education: A Heuristic Model for the Virtual Classroom

Charles E. Beck

University of Colorado at Colorado Springs, USA

Gary R. Schornack

University of Colorado at Denver, USA

Abstract

A new world of distance education demands new thinking. Key components to completing the distance educational system requires that institutions determine how the process is designed, delivered, integrated, and supported. Unfortunately, educational administrators tend to view distance education merely as a process of taking existing readings, exercises, handouts, and posting them to the Web. While this approach may seem cost effective, such an approach is not educationally effective. Although the meaningful

transition to e-education has just begun, determining measures of effectiveness and efficiency requires innovations in social and political thought beyond the advances in technology. The educational process requires feedback from the professor, from the student, and from the wider community, especially businesses who hire the graduates. As e-learning and higher education reach new heights, they are changing the functions of the university. E-learning changes all the ground rules, including time, distance, and pedagogy. We now have new ways to reach and interact with students, present rich content in courses, and deliver the technologies of the smart classroom to students, wherever they are in the world.

Introduction

Education is now the second largest civilian industry in the US after health care (Dunn, 2001). Distance education is a growth industry in the modern economy, with American's spending over one-half of one trillion dollars on it annually and with over two million classes taken by online education (Shea and Boser, 2001).

As a rapid growth industry, distance education provides a method for both educators and businesses to adjust to new market conditions. Implementing such programs may profit from a systems model for viewing all elements of the educational system. Our approach adapts systems theory to distance education: the systems-based Educational Process Model serves as a heuristic to examine recent research for insight into the distance education process. Using a value-added approach, we are applying the model categories to organize key practices identified from the research. Following the model's categories, we will prepare a list of best practices to help practitioners. Our discussion begins with an overview of the Educational Process Model. With this systems view, we then examine inputs into the system, including the objective educational resources and the subjective philosophy of education. The integration of the model includes purpose (objectives and audience), method (technology and methodology), and pedagogy. The outputs include the objective educational experience, itself, and the subjective outcomes. Assessment provides feedback to the system.

We presented our preliminary ideas at a state-wide conference in Teaching with Technology held in Boulder, Colorado, in June 2002, and at the international Conference of the World Association for Case Method Research (WACRA) in Mannheim, Germany, in July 2002. This chapter represents our most recent research into the new paradigm.

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/theory-practice-distance-education/8565

Related Content

The Efficacy of Current Assessment Tools and Techniques for Assessment of Complex and Performance-Based Learning Outcomes in Online Learning
Mahnaz Moallem (2009). *Encyclopedia of Distance Learning, Second Edition* (pp. 793-802).

www.irma-international.org/chapter/efficacy-current-assessment-tools-techniques/11840

The Stress of Online Learning

Deana L. Molinari, Alice E. Duplerand Naomi Lungstrom (2005). *Encyclopedia of Distance Learning* (pp. 1674-1679).

www.irma-international.org/chapter/stress-online-learning/12332

Using the Item Response Theory (IRT) for Educational Evaluation Through Games

Marcelo Henrique Euzébio Batista, Jorge Luis Victória Barbosa, João Elison da Rosa Tavaresand Jonathan Luís Hackenhaar (2013). *International Journal of Information and Communication Technology Education* (pp. 27-41).

www.irma-international.org/article/using-the-item-response-theory-irt-for-educational-evaluation-through-games/83598

A Comparison of Haptic Sketching and Digital Sketching: Considerations of Final Year Design Students

Tom Page (2019). *International Journal of Information and Communication Technology Education* (pp. 146-161).

www.irma-international.org/article/a-comparison-of-haptic-sketching-and-digital-sketching/223477

Blended Learning in Teacher Preparation Programs: A Literature Review

Jared Keengweand Jung-Jin Kang (2012). *International Journal of Information and Communication Technology Education* (pp. 81-93).

www.irma-international.org/article/blended-learning-teacher-preparation-programs/65580